

CLAIMS:

1. Removable roof for a motor vehicle passenger car, which covers an opening between a windshield frame and a body frame structure of a body of the passenger car extending behind vehicle occupant seats, the removable roof is on the one hand, held in position by a form-lockingly operating fixing system and, on the other hand, by a locking system, which locking system is operative between the roof and the vehicle body frame structure constructed as a rollover bar system,

wherein the locking system of the roof has at least one locking device cooperating with the rollover bar system and comprising an operating device with a locking pin which engages in a closing crank.

2. Removable roof according to Claim 1, wherein the operating device is fastened to the roof, and the locking crank is fastened to the rollover bar system.

3. Removable roof according to Claim 1, wherein the locking pin is mounted on a crank arm connected with a swivel shaft, which swivel shaft is connected with a manual lever.

4. Removable roof according to Claim 1, wherein a fixing system is operative between the operating device and the closing crank.

5. Removable roof according to Claim 4, wherein the fixing system has an upright conical locking pin which cooperates with a receiving opening.

6. Removable roof according to Claim 5, wherein the locking pin is

mounted on the operating device, and the receiving opening is provided on the closing crank.

7. Removable roof according to Claim 3, wherein the manual lever is accommodated in a recess of a roof element of the roof.

8. Removable roof according to Claim 7, wherein the manual lever comprises a control plate which is aligned flush with a surface with respect to interior walls of the roof element.

9. Removable roof according to Claim 3, wherein the manual lever, the swivel shaft and the locking pin are constructionally combined and are fastened by means of screws on a roof element of the roof.

10. Removable roof according to Claim 7, wherein the manual lever, the swivel shaft and the locking pin are constructionally combined and are fastened by means of screws on the roof element of the roof .

11. Removable roof according Claim 5, wherein the receiving opening and the closing crank are constructionally combined and are fastened by means of screws on the rollover bar system.

12. Removable roof according to Claim 1, wherein the roof has two roof elements fitted together in a longitudinal center plane of the passenger car, and wherein for each roof element, two operating devices are provided which cooperate with corresponding closing cranks on the rollover bar system.

13. Removable roof according to Claim 12, wherein each roof element projects by means of a rearward roof wall extension beyond a groove of the rollover bar system and, by means of a first sealing section and a second sealing section, extends to the groove or the rollover bar system.

14. Removable roof according to Claim 13, wherein the first sealing section is provided between a free end of the roof wall extension and an upright wall of the rollover bar system.

15. Removable roof according to Claim 13, wherein the second sealing section is operative between an interior wall of the roof wall extension and a horizontal wall of the groove.

16. A passenger car roof assembly comprising:
a windshield frame,
a body frame structure spaced from the windshield frame with a roof opening between the windshield frame and the body frame structure,
a removable roof member operable to close at least part of the roof opening, and
a locking system operable to lock the roof member to the body frame structure,
wherein the locking system includes at least one locking device cooperating with the body frame structure and comprising an operating device with a locking pin which engages in a closing crank.

17. A passenger car roof assembly according to Claim 16, wherein the operating device is fastened to the roof member and the locking crank is fastened to the body frame structure.

18. A passenger car roof assembly according to Claim 17, wherein the body frame structure is part of a vehicle rollover bar system.

19. A passenger car roof assembly according to Claim 16, wherein the locking pin is mounted on a crank arm connected with a swivel shaft, which swivel shaft is connected with a manual lever.

20. A passenger car roof assembly according to Claim 18, wherein the locking pin is mounted on a crank arm connected with a swivel shaft, which swivel shaft is connected with a manual lever.

21. A passenger car roof assembly according to Claim 16, wherein the body frame structure is part of a vehicle rollover bar system, and
wherein for each roof element, two operating devices are provided which cooperate with corresponding closing cranks on the rollover bar system.

22. A passenger car roof assembly according to Claim 21, wherein each roof element projects by means of a rearward roof wall extension beyond a groove of the rollover bar system and, by means of a first sealing section and a second sealing section, extends to the groove or the rollover bar system.

23. A passenger car roof assembly according to Claim 22, wherein the first

sealing section is provided between a free end of the roof wall extension and an upright wall of the rollover bar system.

24. A passenger car roof assembly according to Claim 22, wherein the second sealing section is operative between an interior wall of the roof wall extension and a horizontal wall of the groove.

25. A dimensionally stable removable roof member for use in a passenger car assembly having a roof opening bounded by a windshield frame and a rollover bar assembly spaced from the windshield frame, said roof member including form locking means at one end operable to form lockingly engage with the windshield frame and roof member locking system structure at an opposite end operable to lockingly engage with a rollover bar locking system structure at the rollover bar assembly,

wherein the roof locking system structure includes one of an operating device with a locking pin and a closing crank engageable with the locking pin.

26. A roof member according to Claim 25, wherein the roof locking system structure includes an operating device with a locking pin.

27. A roof member according to Claim 26, wherein the locking pin is mounted on a crank arm connected with a swivel shaft , which swivel shaft is connected with a manual lever.

28. A roof member according to Claim 27, wherein the manual lever is accommodated in a recess of the roof member.

29. A roof member according to Claim 28, wherein the manual lever comprises a control plate which is aligned flush with respect to adjacent interior facing wall surfaces of the roof member.

30. A roof member according to Claim 27, wherein the manual lever, the swivel shaft and the locking pin are constructionally combined and are fastened by means of screws on the roof member.

31. A locking system assembly for locking a rear end of a dimensionally stable roof member to a rollover for assembly in a passenger car roof assembly with a roof opening between a windshield frame and a rollover bar assembly,

wherein the locking system includes at least one locking device which in use cooperates with the rollover bar assembly and includes an operating device with a locking pin which engages in a closing crank.